



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
Ground Water Office (WTR-9)
75 Hawthorne Street
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FACSIMILE TRANSMITTAL

Date: 8 March 1999

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A handwritten signature, likely of John Krause, is written next to the contact information. The signature is in cursive and appears to read "John Krause".

Total pages: 5

Message:

Attached are comments to Secor's SOPs for the Duck Valley Indian Reservation Heating Oil Pipeline Removal and Hydrocarbon Investigation dated February 4, 1999. Please address these comments and provide revised SOPs to BIA and EPA by **31 March, 1999**.

Also, we understand that weather conditions will prevent any work from commencing in the original timeframe. Please notify EPA when a timeframe has been set for the sampling.

Please feel free to call Dave Taylor of our Quality Assurance Office at 415-744-1497 or me at the above phone number if you have any questions.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

March 5, 1999

MEMORANDUM

SUBJECT: Standard Operating Procedures (SOPs) for Duck Valley Indian Reservation Heating Oil Pipeline Removal and Hydrocarbon Investigation, Owyhee, Nevada (EPA Quality Assurance Office Document Control Number WATR227S99VSF1)

FROM: David R. Taylor, Ph.D., Chemist
Quality Assurance Office, PMD-3

THROUGH: Vance S. Fong, P.E., Manager
Quality Assurance Office, PMD-3

TO: Alisa Wong, Project Manager
Ground Water Office, WTR-9

The SOPs, prepared by SECOR International, Inc., and dated February 4, 1999 were reviewed. The review was conducted in conjunction with the program described in the Bureau of Indian Affairs Eastern Nevada Agency Roads Shop Facility Work Plan approved by the Quality Assurance Office on April 15, 1998. Comments also reflect information provided in a February 24, 1999 conference call between EPA and SECOR.

A number of concerns were identified in the review. Chief among these is that the protocol for screening and confirmation and EPA laboratory and commercial laboratory analyses is not clearly described. Concerns were also noted with respect to the collection of samples for volatile analyses. The concerns described below should be addressed before the modified protocol is implemented for the Duck Valley Road Maintenance Shop fuel line project.

Concerns

1. [SOP for Field Logs of Borings] If an example field log is available, a copy should be included with the SOP. Otherwise, the SOP should describe the different columns which are to be used in the notebooks carried on site. It is also not clear from this SOP whether the samples are to actually be logged lithologically (for example following an Universal Soil Classification System (USCS) procedure).

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Reference should be made to the SOP that follows, or perhaps the two SOPs should be combined.

2. [SOP for Field Screening] It should be clarified that the organic vapor meter (OVM) is only performing safety screening on site and that actual screen will be entirely dependent on the results of the rapid turnaround samples from the fixed laboratory. It should be noted that little response has been achieved with OVM units in the past at the site. The SOP from the laboratory covering the screening procedure should be included with the collection of SOPs. Since the intent is to perform method 8015 analyses during the screening, this should be made more explicit.
- 3A. [SOP for Sample Collection Methods, Soil Sampling Methodology] There are aspects of this approach that are not clear as presently written. The conference call of February 24, 1999 clarified the screening and confirmation process, but this needs to be more completely described. The confirmation samples being sent to the Region 9 laboratory. The SOP on field screening also does not describe how the screening/confirmation relationship is established. It is only proposed that every other sample be a screening sample. This suggests that the other sample will be sent to EPA, but it was indicated that the samples sent to EPA would be final confirmation samples. Clarification is needed.
- 3B. The table of proposed analyses by EPA include both gasoline range organics (GROs) and volatile organic compounds (VOCs). Current regional policy dictates that these samples be collected using EPA Method 5035 to forestall the loss of volatile compounds. This requires the use of either ENCORE samplers or else field preservation with methanol or sodium bisulfite. Of these methods, only methanol preservation is feasible for use by the Regional laboratory at this time. This results in a considerable raising of detection limits. This may not be a factor for the GRO analyses, but might for the VOCs, but the EPA Project Officer and the tribe should evaluate this information.
- 4A. [SOP for Sample Collection Methods, Ground Water Sampling Methodology] Examples of Ground Water Level Data Sheets and Ground Water Sampling Field Data Sheets should be provided with the SOP.

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- 4B. For the collection of VOC samples, which would include GRO samples, Region 9 recommends that low flow sampling procedures be used, rather than bailers to minimize the loss of volatile compounds during sampling. If non-aqueous phase liquid is present, this requirement can be waived and bailers would be acceptable.
- 4C. The procedures described presently does not have any provisions for testing and preservation of VOC samples. The SOP should include this procedure, including the pretesting of a sample vial to ensure that the correct amount of preservative has been added.
- 5A. [SOP for Quality Assurance/Quality Control] It is recommended that equipment [rinsate] blanks or field blanks be collected preferentially to trip blanks. Blanks should also be collected for the other analyses that are planned.
- 5B. Although the numbering system is relatively cryptic, it is still recommended that blanks be number in a comparable way to samples and not be given different designations.
- 5C. Duplicate samples should be chosen, if possible, from locations with known or suspected contamination. The SOP should also make provision for the collection of laboratory QA/QC samples at a rate of one per twenty samples. For water samples, this requires the collection of a double volume (i.e., for extractables four liters instead of two, for VOCs six vials instead of three, for metals two liters instead of one, etc.).
- 6. [SOP for Sampling and Shipping Light Non-Aqueous Phase Liquids] If NAPLs are found, the Regional Sample Control Coordinator at Region 9 should be contacted for instructions, as there are presently no provisions to support this analysis. It is not clear whether these samples would be sent to the Region 9 laboratory or not. This should be clarified.
- 7. [SOP for Sample Submittal] It is recommended that this SOP reference the work plan which describes in much greater detail how samples are to be shipped to the Region 9 laboratory. It is also recommended that the SOP include more specific information concerning the shipping of samples to Alpha Laboratories. Chain of Custody procedures and example forms are also not included. The Work Plan should be referenced.

Ms. Alisa Wong
March 5, 1999

Comments

1. [General] It would be helpful if the SOPs were numbered.

If you have any questions or need any further information please feel free to contact me at 415-744-1497.